



INDIANA DEPARTMENT OF TRANSPORTATION

STANDARDS COMMITTEE MEETING AGENDA

Driving Indiana's Economic Growth

May 6, 2005

MEMORANDUM

TO: Standards Committee

FROM: Dannie L. Smith, Secretary

RE: Agenda for the May 19, 2005 Standards Committee Meeting

A Standards Committee meeting is scheduled for 9:00 a.m. on May 19, 2005 in the N755 Bay Window Conference Room. Please enter the meeting through the double doors directly in front of the conference room. The following agenda items are listed for consideration.

New Business

Item 5-1 Design Manual	Mr. Caplinger Part VI	5/19/05 3
Item 5-2 105.06	Mr. Cales Cooperation With Utilities	5/19/05 100-35 6
Item 5-3 107.20	Mr. Cales Contractor's Responsibility for Utility Property and Services	5/19/05 100-68 9
Item 5-4 306.01	Mr. Miller Description	5/19/05 300-12 12
Item 5-5 306.04 306.04.1	Mr. Miller Asphalt Scarification and Profile Preparation Approach Milling	5/19/05 300-13 300-13 13
Item 5-6 306.05	Mr. Miller Asphalt Milling	5/19/05 300-14 14
Item 5-7 306.06	Mr. Miller Asphalt Removal	5/19/05 300-14 15
Item 5-8 306.07	Mr. Miller PCCP Milling	5/19/05 300-14 16

Item 5-9 306.08	Mr. Miller Transition Milling	5/19/05 300-15	17
Item 5-10 306.09	Mr. Miller Method of Measurement	5/19/05 300-15	18
Item 5-11 306.10	Mr. Miller Basis of Payment	5/19/05 300-15	19
Item 5-12 401.05	Mr. Miller Volumetric Mix Design	5/19/05 400-2	21
Item 5-13 401.18	Mr. Miller Pavement Smoothness	5/19/05 400-11	22
Item 5-14 401.19(a) 401.19(b)	Mr. Miller Mixture Density	5/19/05 400-13 400-14	23
Item 5-15 402.13	Mr. Miller Spreading and Finishing	5/19/05 400-22	26
Item 5-16 409.03(f)1	Mr. Miller Profilograph	5/19/05 400-39	27
Item 5-17 Standard Drawing	Mr. Caplinger 802-SNOC-05	5/19/05	29
Item 5-18 904.02(c)	Mr. Miller For SMA Mixtures	5/19/05 900-28	32
Item 5-19 904.03(d)	Mr. Miller Surface Aggregate Requirements for HMA and SMA	5/19/05 900-31	33
904.03(d)1	HMA Coarse Aggregate	900-31	
904.03(d)2	SMA Coarse Aggregate	900-31	

cc: Committee Members (7)	ACPA Representative (1)
Districts (28)	Contech Representative (1)
FHWA (3)	IKO Representative (1)
ICI Representative (1)	Bridgetek Representative (1)
IMAA Representative (1)	INDOT Toll Road (3)
APAI Representative (1)	Traffic Design (3)
CE of I Representative (1)	Estimators (3)
ADS Representative (1)	Specification Writers (4)
Mirich Representative	

ADOPTION OF PARTS OF PART vi OF DESIGN MANUAL

The following chapters are ready for approval by the Standards Committee.

<u>Chapter</u>	<u>Title</u>
58	Literature
59	Structure Type and Size
60	Loads and Analysis
61	Decks
62	Reinforced Concrete
63	Prestressed Concrete
64	Steel
65	Timber
66	Foundations
67	Bents, Piers, and Abutments
72	Bridge Rehabilitation

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____



Indiana Department of Transportation
Design Division
Memorandum

April 26, 2005

10 CAS

TO: Tom Caplinger *TC*
Highway Engineer Supervisor IV

THRU: Gerard F. Mroczka *GFM*
Chief, Design Division

FROM: John E. Jordan *JEJ*
Michael A. Holowaty *MAH*
Anne M. Rearick *AMR*
Thomas H. Seeman *THS*
Niranjan B. Shah *NBS*
John E. Wright *JEW*
Design Section Managers

RE: Standards Committee

The following bridge design manual chapters have been completed and are ready to be distributed:

Chapter	Title
58	Literature
59	Structure Type and Size
60	Loads and Analysis
61	Decks
62	Reinforced Concrete
63	Prestressed Concrete
64	Steel
65	Timber
66	Foundations
67	Bents, Piers, and Abutments
72	Bridge Rehabilitation

The Committee that prepared the above chapters consisted of Jorgensen (design manual consultant) and representatives from FHWA, design consultants, Contracts and Construction Division, and the Design Division.

The chapters were prepared in accordance with the Third Edition (2004) of the AASHTO LRFD (Load and Resistance Factor Design) Bridge Design Specifications, with the exception of the chapters regarding foundations and bridge rehabilitation. AASHTO is still refining foundation design using LRFD. A major rewrite of the foundation chapter will be voted on by AASHTO during June; if it is approved it would be issued as an interim during the summer of 2006. Bridges will be rehabilitated based upon the criteria contained in the design

manual---generally rehabilitated to HS20 in accordance with the 17th edition, using Load Factor.

We recommend that bridges placed on future professional service bulletins be designed using the LRFD method and in accordance with the above bridge design chapters. We recommend that the appropriate consultant contracts be revised to reference the AASHTO LRFD Bridge Design Specifications.

Please have this item placed on the May 2005 Standards Committee agenda.

The remaining chapters to be developed are:

68	Earth Retaining Systems
69	Railroads
70	Bridge Design Operational Information
71	Bridge Design Details
73	Miscellaneous Structures.

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 105, BEGIN LINE 137, DELETE AND INSERT AS FOLLOWS:

105.06 Cooperation with Utilities

Prior to letting the contract, the Department will notify all known utility companies *in accordance with 105 IAC 13-1*, all pipe line owners, or other parties affected, and endeavor to have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction, made as soon as practicable.

Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction which are to be relocated or adjusted are to be moved by the owners at their expense, except as otherwise provided for in the special provisions or as noted on the plans.

The plans show all known utilities located within the limits of the contract according to information obtained from the various utility companies. The accuracy of the plans in this respect is not guaranteed by the Department. All of the permanent and temporary utility appurtenances in their present or relocated positions shall have been considered in the bid. ~~No additional compensation will be allowed for delays, inconvenience, or damage sustained by the Contractor due to interference from the said utility appurtenances or the operations of moving them. However, if the prosecution of the work is delayed unnecessarily by the removal or relocation of the utilities, the time for completion may be extended in such amount as the condition justifies, provided the delay was not caused by negligence of the Contractor.~~

The contract documents will include a work plan in accordance with 105 IAC 13-1 for each known utility which includes a description of all necessary work and a schedule for completion. However, if a utility fails to relocate or adjust their facilities as provided for in the contract documents and the Contractor sustains delays and/or losses that could not have been avoided by the Contractor's judicious handling of forces, equipment, and plant or by reasonable revisions to the schedule of operations, and the Contractor has documented its utility coordination efforts and sustained delays and losses, and if the sustained delays and losses were not caused by the negligence of the Contractor, the Contractor shall pursue appropriate compensation from the negligent party in accordance with IC 8-23-2-5 if a utility fails to meet its work plan or in accordance with 104.03 if the Department's actions or lack thereof caused the delay and loss. If the Contractor is delayed and it provides the aforementioned information to the Engineer, the time for completion may be extended in such amount as the conditions justify.

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 105, CONTINUED.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
107.20 Pg 100-68	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
107-R-169	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

SMITH, DAN

From: SMUTZER, RICHARD
Sent: Thursday, May 05, 2005 2:32 PM
To: HULL, STEVE; KUCHLER, DENNIS; RIGGS, JACK
Cc: SMITH, DAN; HOFF, RYAN
Subject: FW: Proposed Standard Specification Changes required to meet SB 513 Requirements by June 30, 2005

Gentlemen:

Attached herewith are proposed Specification changes required for INDOT compliance with the New Law (SB 513). Please review these proposed changes and let me know if you concur or suggest different language. Thanks,
RKS

Dan:

We need to put these on the next available agenda for the Standards Committee and when passed they will have to go into a Recurring Special Provision to meet this time requirement. RKS

-----Original Message-----

From: MICHL, BETTY
Sent: Thursday, May 05, 2005 2:18 PM
To: SMUTZER, RICHARD
Subject:

Betty Michl
Indiana Department of Transportation
Executive Office
(Tel) 317-233-4688



5/6/2005

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 107, BEGIN LINE 616, DELETE AND INSERT AS FOLLOWS:

107.20 Contractor's Responsibility for Utility Property and Services

At points where the Contractor's operations are adjacent to properties of railroad, telegraph, telephone, and power companies or are adjacent to other property, damage to which might result in considerable expenses, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

There shall be cooperation with the owners of all underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum, and that services rendered by those parties are not unnecessarily interrupted.

If it is necessary to place pipes or conduits through structures, sheet metal sleeves shall be provided around the pipe or conduit to make a sliding joint or provide suitable openings as required, with no additional payment.

If there is an interruption to water or utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority, and shall cooperate with the said authority in the restoration of service. If water service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

The Contractor shall establish and maintain open and accurate communication with each utility affected by the construction with a copy of all communication being sent to the Engineer. The Contractor shall prepare its construction schedule to accommodate all of the utility work plans included in the contract documents.

~~The Contractor shall assume all risk and liability for any inconvenience, delay, or expense that may be occasioned by public utilities or other public or private property within the limits of the proposed improvement, whether or not such property is shown on the plans. However, time for completion of the contract may be extended in accordance with 105.06.~~ Regardless of previous notification by the Department, the Contractor shall give notice to the owners of each utility located within the contract limits, or which might be affected by the work, in sufficient time before beginning work for the owners to relocate or protect their property. No work shall be done which injures or damages such property until satisfactory arrangements have been completed with the owner for its protection, relocation, or reconstruction.

Prior to any excavation work, the Contractor shall notify the Indiana Underground Plant Protection Service, IUPPS, in accordance with IC 8-1-26 requirements and notify the Engineer prior to commencing construction operations in an area that may affect underground utilities.

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 107, CONTINUED.

If abandoned underground utilities are encountered during construction, sections of which are to be removed, ends of pipes that remain in place shall be sealed with class A concrete as directed. Concrete used for this purpose will be paid for at the contract unit price per cubic yard (cubic meter) for concrete, A, in structures. Cutting of abandoned gas lines shall be by mechanical methods. A cutting torch shall not be used.

If a permit is issued to a city or other governmental unit for the installation of conduits, poles, or other appurtenances for artificial lighting of the structure, it may be necessary or desirable to revise the plans or make structural changes as needed to accommodate such installation. In this event, the provisions of 104.02 shall apply to all changes in quantities of work.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
107-R-169	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

SMITH, DAN

From: SMUTZER, RICHARD
Sent: Thursday, May 05, 2005 2:32 PM
To: HULL, STEVE; KUCHLER, DENNIS; RIGGS, JACK
Cc: SMITH, DAN; HOFF, RYAN
Subject: FW: Proposed Standard Specification Changes required to meet SB 513 Requirements by June 30, 2005

Gentlemen:

Attached herewith are proposed Specification changes required for INDOT compliance with the New Law (SB 513). Please review these proposed changes and let me know if you concur or suggest different language. Thanks, RKS

Dan:

We need to put these on the next available agenda for the Standards Committee and when passed they will have to go into a Recurring Special Provision to meet this time requirement. RKS

-----Original Message-----

From: MICHL, BETTY
Sent: Thursday, May 05, 2005 2:18 PM
To: SMUTZER, RICHARD
Subject:

Betty Michl
Indiana Department of Transportation
Executive Office
(Tel) 317-233-4688



5/6/2005

Item No. 4
Mr. Miller
Date: 5/19/05

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306 BEGIN LINE 3, INSERT AS FOLLOWS:

306.01 Description

This work shall consist of the milling of asphalt and concrete pavements and the disposal of milled materials *in accordance with 105.03*.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306, AFTER LINE 81, INSERT AS FOLLOWS:

Milled non-mainline areas such as auxiliary lanes left open to traffic for longer than 10 work days will be assessed \$800 per day per lane mile (\$500.00 per day per lane kilometer), or portion thereof, as liquidated damages, not as a penalty, but as damages sustained for each work day that the milled area remains open to traffic.

306.04.1 Approach Milling

Approach milling shall consist of milling the surface and cutting a wedge at the driveways, commercial or public road approaches. The existing approach shall be milled a minimum depth of no less than 1/4 in. (6 mm) to accommodate the approach pavement. The approach milling shall be completed to provide a smooth transition from the mainline pavement to the termini of the approach. The existing approach pavement shall be cut to provide a vertical face of 1.5 in. (38 mm) for the termini of surface.

Mailbox approaches may be milled to maintain the mainline profile and cross-slope.

Automatic control devices will not be required on surface milling equipment used for approach cut off the mainline. Cutting shall not damage any pavement that is to remain in place.

Approach milling shall not be performed at driveways unless it is required to meet a permanent surface that continues beyond the construction limit. If the driveway is other than HMA or PCC beyond the construction limits, the approach milling is not required.

The vertical cut face for commercial or public road approaches shall be transitioned at a rate of 24:1 or as approved.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y____ N____ By - Additional or Revision
None	Frequency Manual Update Required? Y____ N____ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	402-TMPT-01
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306, AFTER LINE 101, INSERT AS FOLLOWS:

Milled non-mainline areas such as auxiliary lanes left open to traffic for longer than 10 work days will be assessed \$800 per day per lane mile (\$500.00 per day per lane kilometer), or portion thereof, as liquidated damages, not as a penalty, but as damages sustained for each work day that the milled area remains open to traffic.

The vertical cut face shall be transitioned by HMA, CMA or prefabricated materials at a rate of 24:1 or as approved.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
401.11 Pg 400-45	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	402-TMPT-01
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306, AFTER LINE 110, INSERT AS FOLLOWS:

The vertical cut face shall be transitioned by HMA, CMA or prefabricated materials at a rate of 24:1 or as approved.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	402-TMPT-01
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306, AFTER LINE 130, INSERT AS FOLLOWS:

Milled non-mainline areas such as auxiliary lanes left open to traffic for longer than 14 calendar days will be assessed \$800 per day per lane mile (\$500.00 per day per lane kilometer), or portion thereof, as liquidated damages, not as a penalty, but as damages sustained for each work day that the milled area remains open to traffic.

The vertical cut face shall be transitioned by HMA, CMA or prefabricated materials at a rate of 24:1 or as approved.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
305.04(b) Pg 300-9	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	402-TMPT-01
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306, BEGIN LINE 131, DELETE AND INSERT AS FOLLOWS:

306.08 Transition Milling

Transition milling shall consist of cutting a wedge at the beginning and ending of projects, ~~drives, and paving exceptions and public road approaches.~~ The existing pavement shall be cut to provide a vertical face of 1.5 in. (38 mm) for the termini of each overlay lift of base, intermediate, or surface. The existing pavement shall be milled at a rate of ~~60:1~~ 720:1 or as directed to achieve the specified cut where the pavement transition overlay lifts differ from cut depth. ~~Pavement transitions for driveways and public road approaches will only be cut for the surface course. The vertical cut face shall be transitioned by HMA, CMA or prefabricated materials at a rate of 24:1 or as approved.~~

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	402-TMPT-01
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 306, BEGIN LINE 144, DELETE AND INSERT AS FOLLOWS:

306.09 Method of Measurement

Approach milling, Asphalt asphalt milling, asphalt removal, PCCP milling, scarification/profile milling, and transition milling will be measured by the square yard (square meter) of the milled area.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision Frequency Manual Update Required? Y___ N___ By - Addition or Revision
305.06 Pg 300-11	
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

306.10 Basis of Payment

Payment will be made under:

Pay Item	Pay Unit Symbol
<i>Milling, Approach</i>	<i>SYS (m2)</i>
Milling, Asphalt, _____ in. (mm)	SYS (m2)
thickness	
Milling, Asphalt Removal	SYS (m2)
Milling, PCCP	SYS (m2)
Milling, Scarification/Profile	SYS (m2)
Milling, Transition	SYS (m2)

19

SMITH, DAN

From: MILLER, MARK
Sent: Thursday, April 21, 2005 7:25 AM
To: SMITH, DAN
Subject: FW: 300 & 400 Spec changes

Please include these items on the May agenda.

-----Original Message-----

From: ANDREWSKI, DAVID
Sent: Wednesday, April 20, 2005 3:03 PM
To: MILLER, MARK
Subject: 300 & 400 Spec changes

Mark

Attached are the proposed changes to the 300 Section Milling Specifications and the 400 Specification changes developed by their respective committees. Please submit these to Dan Smith to be included on the May Committee agenda.

Dave

4/21/2005

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 401, BEGIN LINE 85, DELETE AND INSERT AS FOLLOWS:

Dust/Calculated Effective Binder Ratio shall be taken from 0.6 to 1.2, when the aggregate gradation passes above the primary control sieve (PCS) control point and 0.8 to 1.6 when the aggregate gradation ~~passes beneath the PCS~~ *is less than or equal to the PCS*. The Dust/Calculated Effective Binder Ratio for 4.75 mm mixtures shall be 0.9 to 2.0.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision Frequency Manual Update Required? Y___ N___ By - Addition or Revision
304.05 Pg 300-7	
401.04 Pg 400-1	
401.06 Pg 400-5	
402.05 Pg 400-19	
715.12 Pg 700-112	
718.02 Pg 700-125	
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 401, BEGIN LINE 441, DELETE AND INSERT AS FOLLOWS:

Each finished course of base and intermediate shall be subject to approval. The pavement smoothness shall be checked on any new intermediate course located immediately below a surface course and the surface course at the locations as designated in ITM ~~901~~ 912.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision Frequency Manual Update Required? Y___ N___ By - Addition or Revision
402.18 Pg 400-25 410.18 Pg 400-47	
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr. Second: Mr. Ayes: Nays:	Action: Passed as submitted; revised Effective - _____ Letting _____ Supplementals Withdrawn. Resubmit? _____ Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 401, BEGIN LINE 496, DELETE AND INSERT AS FOLLOWS:

(a) Mixture

Sublot test results for mixture properties will be assigned pay factors in accordance with the following.

BINDER CONTENT		
DENSE GRADED	OPEN GRADED	PAY FACTOR
Deviation from JMF (\pm %)	Deviation from JMF (\pm %)	Pay Factor
≤ 0.2	≤ 0.2	1.05
0.3	0.3	1.04
0.4	0.4	1.02
0.5	0.5	1.00
0.6	0.6	0.95 90
0.7	0.7	0.90 75
0.8	0.8	0.85 50
> 0.8 0.9	> 0.8 0.9	0.85 — 0.05 per each 0.1% over 0.8% 0.25
1.0	1.0	0.00
> 1.0	> 1.0	Submitted to the Materials and Tests Division

* Test results will be considered and adjudicated as a failed material in accordance with normal Department practice as listed in 105.03.

VMA		
DENSE GRADED	OPEN GRADED	PAY FACTOR
Deviation from JMF (\pm %)	Deviation from JMF (\pm %)	Pay Factor
≤ 0.5		1.05
> 0.5 and ≤ 1.0	All	1.00
> 1.0 and ≤ 1.5		0.95 80
> 1.5 and ≤ 2.0		0.90 50
> 2.0 and ≤ 2.5		0.85 00
> 2.5		0.85 — 0.02 per each 0.1% over 2.5% Submitted to the Materials and Tests Division*

* Test results will be considered and adjudicated as a failed material in accordance with normal Department practice as listed in 105.03.

AIR VOIDS		
DENSE GRADED	OPEN GRADED	PAY FACTOR
Deviation from JMF (\pm %)	Deviation from JMF (\pm %)	Pay Factor
≤ 0.5	≤ 1.0	1.05
> 0.5 and ≤ 1.0	> 1.0 and ≤ 3.0	1.00
1.1	3.1	0.97
1.2	3.2	0.94
1.3	3.3	0.91
1.4	3.4	0.88
> 1.0 and ≤ 1.5	> 3.0 and ≤ 3.5	0.95 85
1.6	3.6	0.77
1.7	3.7	0.69
1.8	3.8	0.61
1.9	3.9	0.53
> 1.5 and ≤ 2.0	> 3.5 and ≤ 4.0	0.85 45
> 2.0	> 4.0	Submitted to the Materials and Tests Division

* Test results will be considered and adjudicated as a failed material in accordance with normal Department practice as listed in 105.03.

For mixtures produced during a plant's adjustment period, pay factors based on the JMF with the above tolerances will be used to compute quality assurance adjustments.

(b) Density

Sublot test results for density will be assigned pay factors in accordance with the following.

DENSITY		
Percentages are based on %MSG	Pay Factors – Percent	
Dense Graded	Open Graded	
≥ 97.0		Submitted to the Materials and Tests Division*
95.6 - 96.9		1.05 - 0.01 for each 0.1% above 95.5
94.0 - 95.5		1.05
93.1 - 93.9		1.00 + 0.005 for each 0.1% above 93.0
92.0 - 93.0	84.0	1.00
91.0 - 91.9		1.00 - 0.003 010 for each 0.1% below 92.0
90.0 - 90.9		0.97 90 - 0.012 040 for each 0.1% below 91.0
89.0 - 89.9		0.85 50 - 0.030 050 for each 0.1% below 90.0
≤ 88.9		Submitted to the Materials and Tests Division*

* Test results will be considered and adjudicated as a failed material in accordance with normal Department practice as listed in 105.03.

The pay factors shall be rounded to the nearest 0.01.

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 401, CONTINUED.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
401.09 Pg 400-6	Frequency Manual
401.16 Pg 400-10	Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 402, BEGIN LINE 228, INSERT AS FOLLOWS:

The finished thickness of each course shall be at least two times but not more than four times the maximum particle size as shown on the DMF or JMF. *The finished thickness of wedge and level mixtures shall be at least 1.5 times but not more than six times the maximum particle size as shown on the DMF or JMF.* Feathering may be less than the minimum thickness requirements.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
403.07 Pg 400-28	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 409, BEGIN LINE 128, DELETE AND INSERT AS FOLLOWS:

1. Profilograph

The profilograph shall be in accordance with ITM ~~901~~ 912.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

SMITH, DAN

From: MILLER, MARK
Sent: Thursday, April 21, 2005 7:25 AM
To: SMITH, DAN
Subject: FW: 300 & 400 Spec changes

Please include these items on the May agenda.

-----Original Message-----

From: ANDREWSKI, DAVID
Sent: Wednesday, April 20, 2005 3:03 PM
To: MILLER, MARK
Subject: 300 & 400 Spec changes

Mark

Attached are the proposed changes to the 300 Section Milling Specifications and the 400 Specification changes developed by their respective committees. Please submit these to Dan Smith to be included on the May Committee agenda.

Dave

4/21/2005

Item No. 17
Mr. Caplinger
Date: 5/19/05

REVISION TO STANDARD DRAWINGS

802-SNOC-05, Overhead Sign Details

This revision adds a Multi-Ply Tube butt splice

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
None	See Above
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

INDIANA DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION
INDIANAPOLIS, INDIANA 46204-2249
INTER-DEPARTMENT COMMUNICATION

February 14, 2005

MEMORANDUM

TO: Thomas Caplinger 
Road Design Engineer

FROM: Dale Louie 
Engineer of Sign and Lighting Design

SUBJECT: Base Plate and Flange Plate Connection to Tube for Sign Structures

We would like to make a revision on standards E 802-SNOC-05 and 802-SNOC-05. This revision would allow Contractors to use either socket joint for single-ply tube or butt splice for multi-ply tube. We believe this will increase bidding competition. We submit this proposed detail to the Spec. Committee for review and approval.

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 904, BEGIN LINE 143, DELETE AS FOLLOWS:

(c) For SMA Mixtures

Fine aggregate for SMA shall be limestone, dolomite, crushed gravel, SF, or ACBF. ~~SF sand may be used only when the course aggregate is SF.~~ Crushed gravels shall have a minimum fine aggregate angularity of 45 in accordance with AASHTO T 304 Method A. Fine aggregates shall be non-plastic in accordance with AASHTO T 90.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision
None	Frequency Manual Update Required? Y___ N___ By - Addition or Revision
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 904, BEGIN LINE 269, DELETE AND INSERT AS FOLLOWS:

(d) Surface Aggregate Requirements for ~~HMA and SMA~~

The surface mixture aggregates selection shall be based on the ESAL category as follows.

1. HMA Coarse Aggregate

Coarse Aggregate Type	Traffic ESALs		
	< 3,000,000	< 10,000,000	≥ 10,000,000
Air-Cooled Blast Furnace Slag (Note 1)	Yes	Yes	Yes
Steel Furnace Slag	Yes	Yes	Yes
Sandstone	Yes	Yes	Yes
Crushed Dolomite	Yes	Yes	Note 2 1
Polish Resistant Aggregates (Note 1)	Yes	Yes	Note 2 1
Crushed Stone	Yes	No	No
Gravel (Note 1)	Yes	No	No

Note 1. ~~ACBF or Gravel may not be used in SMA mixtures.~~

Note 2 1. Polish resistant aggregates or crushed dolomite may be used when blended with ACBF or sandstone but cannot exceed 50% of the coarse aggregate by weight (mass), or cannot exceed 40% of the coarse aggregate by weight (mass) when blended with steel furnace slag. ~~Polish resistant aggregates or crushed dolomite may not be used in SMA mixtures.~~

2. SMA Coarse Aggregate

Coarse Aggregate Type	Traffic ESALs		
	< 3,000,000	< 10,000,000	≥ 10,000,000
Air-Cooled Blast Furnace Slag	No	No	No
Steel Furnace Slag	Yes	Yes	Yes
Sandstone	Yes	Yes	Yes
Crushed Dolomite	No	No	No
Polish Resistant Aggregates	No	No	No
Crushed Stone	No	No	No
Gravel	No	No	No

REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 904, CONTINUED.

Other sections containing specific cross references:	General Instructions to Field Employees Update Required? Y___ N___ By - Additional or Revision Frequency Manual Update Required? Y___ N___ By - Addition or Revision
401.03 Pg 400-1	
402.03 Pg 400-18	
402.07(a) Pg 400-19	
402.07(b) Pg 400-19	
503.03(e) Pg 500-28	
604.07(c) Pg 600-17	
Recurring Special Provisions potentially affected:	Standard Sheets potentially affected:
400-R-475	None
Motion: Mr.	Action: Passed as submitted; revised
Second: Mr.	Effective - _____ Letting
Ayes:	_____ Supplementals
Nays:	
	Withdrawn. Resubmit? _____
	Received FHWA Approval? _____

SMITH, DAN

From: MILLER, MARK
Sent: Thursday, April 21, 2005 7:25 AM
To: SMITH, DAN
Subject: FW: 300 & 400 Spec changes

Please include these items on the May agenda.

-----Original Message-----

From: ANDREWSKI, DAVID
Sent: Wednesday, April 20, 2005 3:03 PM
To: MILLER, MARK
Subject: 300 & 400 Spec changes

Mark

Attached are the proposed changes to the 300 Section Milling Specifications and the 400 Specification changes developed by their respective committees. Please submit these to Dan Smith to be included on the May Committee agenda.

Dave

4/21/2005